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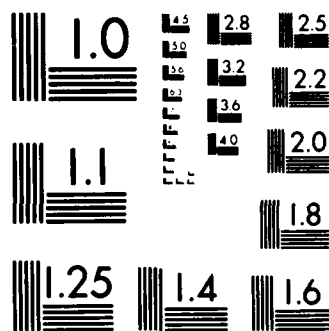
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AFOSR-TR. 87-0969

FINAL REPORT

to

Air Force Office of Scientific Research

Bolling Air Force Base

Washington, D.C. 20332

University Research Instrumentation Procurement

by

Stephen G. Wilson

Department of Electrical Engineering

Thornton Hall

University of Virginia

Charlottesville, VA 22901

April, 1986



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This report describe procurements made under contract number AFOSR-85-0120, as part of the Department of Defense, Univeristy Research Instrumentation Program. The equipment purchased is in support of analysis and encoding of color motion imagery. Installation of all equipment has been completed and is functional, attached to a VAX 11/750 in the Department of Electrical Engineering and the Center for Computer Aided Engineering.

The major expenditure was for a Gould IP8400 imaging system with high-speed (30 frames per second) color storage and display. This system is operated as a peripheral on the VAX 11/750 running UNIX. To support image processing taks, a CDA Array Processor was also purchased and attached to the system bus. Finally, to aid in data presentation, a hard-copy print camera was purchased from NISE Corp. A Complete list of expenditures is included in Table I.

The equipment is presently being used for a variety of image processing tasks, both for still and moving images. Plans include doing computer vision research and interdisciplinary work with groups who need real-time display of imagery.

TABLE I

Gould

| | |
|---------------------------------------|-----------|
| IP8400 Processor Controller | 18,450.00 |
| IP85M Image Memory | 12,600.00 |
| IP85 VOC Video Output Control | 2,240.00 |
| IP85TB2 Trackball | 2,520.00 |
| IP85CG Dual Cursor Generator | 1,350.00 |
| IP85AN Alphanumeric Overlay Generator | 990.00 |
| IP85DVP Digital Video Processor | 5,400.00 |
| IP85VD1 Video Signal Digitizer | 8,640.00 |
| IP85PILL External Sync Receiver | 1,350.00 |
| IP8DMA DEC DMA Interface | 1,620.00 |
| IP8MS1 Multi-Sync Model | 765.00 |
| CMI9LC RGB Monitor, 19 Inch | 2,800.00 |
| SIP8DEMVMS Dec Demo. Software | 540.00 |
| IP85DOC I Documentation | .00 |
| IP85DOCII Documentation | .00 |
| IP85DOCIV Documentation | .00 |
| SIP8LPVMS LIPS V.4.0. (Second User) | 1,800.00 |
| CX25 Coaxial Video Cable, 25 Foot | 224.00 |
| M20-1 HI-Speed Disk System, 300 MB | 44,325.00 |

CDA

| | |
|------------------------------------|-----------|
| Array Processor with 512 Kb Memory | 20,000.00 |
|------------------------------------|-----------|

NISE, CORP.

| | |
|--------------------------------------|----------|
| 3500 F Film Recorder | 3,300.00 |
| V10 16,77KHZ Horizontal Sweep Rate | .00 |
| R10 RGB | .00 |
| P10 100-120 VAC, 50/60 HZ | .00 |
| C50 Camera with Polaroid CB-71 Black | 950.00 |

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|-------|------------|
| Total | 129,864.00 |
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